#### **Boulder's Climate Commitment:**

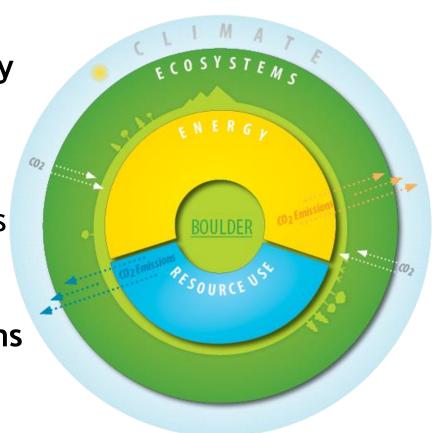


#### How to reach our goal

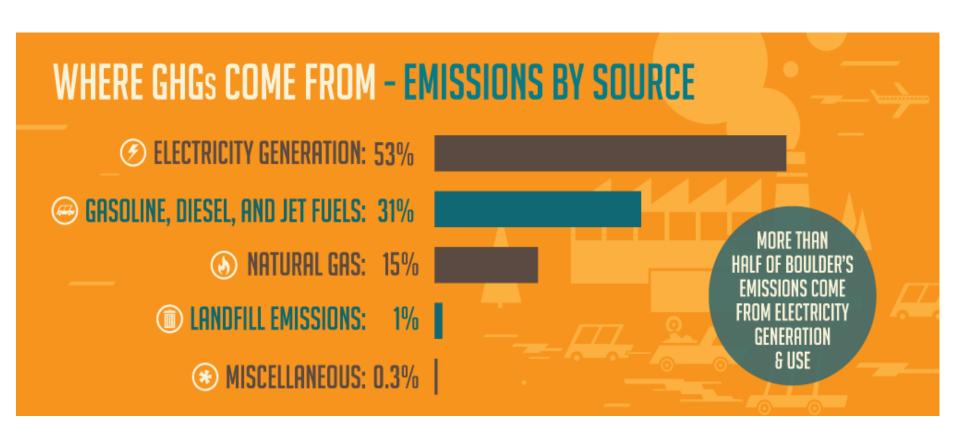
 Transition to a renewable energy economy and lifestyle

• Use resources more efficiently and to reduce secondary emissions impacts

• Restore and enhance ecosystems to support climate stabilization functions.



## **Boulder 2012 Energy-Related Emissions—Where it Comes From**



99% of Boulder's GHGs are From Fossil Fuel Energy Use

#### Climate Action At a Glance—Existing Programs

#### **High Performance Buildings**

> CAP Tax

1. Building Codes

Residential Commercial

2. Building Ordinances

SmartRegs C&I Ordinance

3. Voluntary Programs

Energy Smart PACE

#### **Mobility**

4. Mobility Strategies

**Transport Master Plan** 

#### **Energy Source**

5. Municipalization









# Boulder's Energy Future and the Municipalization Exploration Project

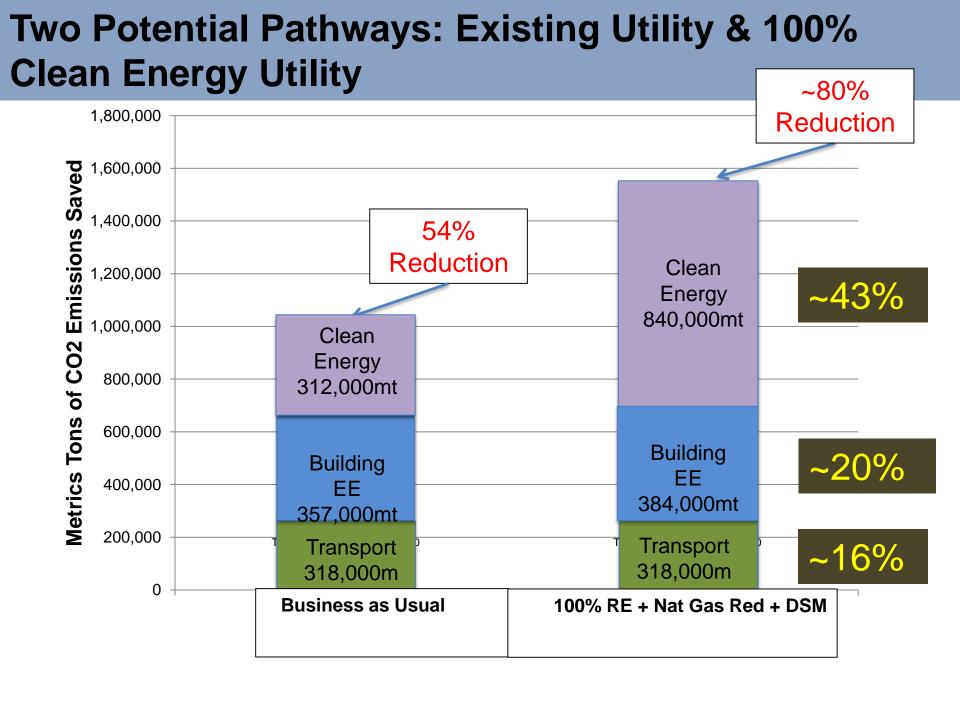


reliable low-cost possible

BoulderEnergyFuture.com







#### Climate Action: Pilots & Initiatives

#### **High Performance Buildings**

- 1. Solar Grants
- 2. Community Power Partnership
- 3. EV/PV/EE Pilot -SNUGG Home (BEC)
- 4. Boulder Housing Partners Pilot (BEC)
- 5. Thermal Decarbonization Strategy
- 6. Superior Ecotech (BEC)

#### **Energy Source**

- 11. Solar Capacity Analysis
- 12. Solar + Storage Pilot (BEC)
- 13. Nanogrid Pilots
- 14. Local Carbon Offset Fund
- 15. Energy Transformation Roadmap

#### **Mobility**

- 7. Lightning Hybrids (BEC)
- 8. eGo Carshare Pilot (BEC)
- 9. Workplace Charging Challenge
- 10. Employee EV Commute Pilot



#### Boulder Energy Initiatives--Solar

Existing Adoption—Over 15 MWe of installed rooftop solar





Just released a community solar tool providing capacity for every building in Boulder

Just completed a group purchase program that resulted in over 200 new solar contracts and 104 EV's sold!



#### **Short-Term Target Development**

#### **Targets 2020-2050**

Prioritize actions to transition to a renewable energy-based economy and lifestyle. Continue to explore innovations in responsible resource use and effective stewardship of local ecosystems.

|              | TARGET AREA   | 2020  | 2050 |
|--------------|---------------|---|------|
|              |               |   |      |
|              | Buildings     | 6%  | 20%  |
| ENERGY       | Mobility      | 3%  | 16%  |
|              | Energy Source | 10%   | 43%  |
|              |               |   |      |
|              | Waste         | 1%  | 2%   |
| RESOURCES    | Water         |   |      |
| TILISOOTICES | Food          |   |      |
|              |               | Methodologies for evaluating emission reduction impacts and targets under development |      |
| ECOSYSTEMS   | Urban         |   |      |
|              | Wildland      |   |      |
|              | Agricultural  |   |      |
|              | TOTAL         | 20%   | 81%  |













#### Safe Haven Resilience

#### **Boulder, Colorado, USA**

- Population: 102,420
- Main Economic Sector: Aerospace, natural science and higher education
- Unemployment: 3.5%
- Geography Type: Mountains, foothills, plains
- Main Climate Hazards: Flooding, drought and wildfires
- Share of renewables in energy supply: 20%



#### **Goals of Project**

- 1. Ensure continuity of critical community services
- 2. Protect high-risk and vulnerable populations
- 3. Enhance capacity to provide basic services at a neighborhood- scale







### How does the project intend to transform society within the local context?

- Radical rethinking of infrastructure independency and cascading failure
- Imagines infrastructure as interlinked life safety systems
- Disrupts model of large, centralized service provision







## How will the project contribute to climate adaptation or mitigation

- goals?
  Boulder's climate risks swift, catastrophic and inherently unpredictable
- Safe havens lay foundation for full community transition to renewable DG
- Critical facilities will transition first, more community support for higher startup costs













